

"VERSION WITH MARKINGS TO SHOW CHANGES MADE"

It is apparent to a person skilled in the art, that all the above weight and drag reductions contribute to a longer range of said vehicle, as compared to other prior art two wheeled electric vehicles, even when having an identical prior art propulsion systems, equipment and payload.

Both materials, the magnesium and the ultrahigh molecular weight polyethylene with the honeycomb core composite sandwich construction, as well as the plain polyethylene double wall construction increase the safety, because they have the highest energy absorption and vibration damping characteristics of all known materials. This unique combination also contributes to a quiet ride of the vehicle. The fire retardant paper honeycomb may be made from a recycled paper economically, and the magnesium metal and polyethylene are also easily recyclable.

All described magnesium components may be protected from corrosion by well known design rules recommended for magnesium and by synergistic fluoropolymer coatings, such as made by General Magnaplate Corp., Linden, NJ., or anodic oxidation coatings, to overcome low corrosion resistance of magnesium.

The propulsion system comprises, at least one electric motor 31 behind the seat 6, which may have preferably copper disc clutch 200 (which may be controlled by the driver by well known means), and a reduction drive 32 driving preferably
a larger rear wheel 4 through a timing belt 33 and pulleys 33A and 33B. At least one battery or batteries 96 and 97 are preferably mounted under the seat 6, or on both sides of the